

REMARKS

This is in response to the Official Action of February 12, 2003. The points raised therein are addressed below in the order originally set forth.

1. Claims 18, 19 and 22 are rejected under 35 USC 112, first paragraph, it being indicated that applicant lists egg phospholipids as non-ionic surfactants while the prior art cited indicates that egg phospholipids are ionic surfactants, and it being alleged that a skilled artisan would be required to do undue experimentation to make and/or use a non-ionic egg phospholipid. However, the egg phospholipids used are neutral molecules at a physiological pH and generally within the recited pH range of 5-10. No undue experimentation would be required because the properties of egg phospholipids at various pHs are known or readily determined by skilled persons, and skilled persons would be able to easily and routinely adjust the pH of the preparation to render the egg phospholipid nonionic. Note also that the claims state a pH range consistent with this feature of the invention. Accordingly, it is respectfully submitted that these claims satisfy the requirements of 35 USC 112, first paragraph, and respectfully submitted that this rejection should be withdrawn.

Claims 19 and 22. It is noted that claims 18 and 22 appear to be free of the prior art as applied in the first Official Action, and respectfully submitted that these claims should be allowed.

2. Claims 1-10 stand rejected as obvious under 35 USC 102(a) over WO 00/00207 in view of Webb et al. These claims are cancelled herein, without prejudice or disclaimer, for the purpose of simplifying the issues. Accordingly it is respectfully submitted that this rejection is now moot and may be withdrawn.

3. Claims 11-18, 20, 21, and 23-28 stand rejected as obvious under 35 USC 103(a) over **Lopez-Berestein et al.** (US 2002/0143062) in view of **Chen et al.** (US 6,267,985) and **Shudo et al.** (US 5,676,146). For the reasons set forth below, this rejection is respectfully traversed.

The claims of the present invention are directed to emulsion compositions rather than liposome compositions. For example, claim 11 recites in the preamble

thereof "A pharmaceutical emulsion composition...." The words "emulsion" and "composition" appearing in the body of claim 11 have been amended above to recite "emulsion composition" for the purpose of clarity and consistency, and to make abundantly clear that the instant compositions are emulsion compositions.

As noted by Lopez-Berestein, fenretinide is poorly soluble in water and various attempts have been made to create soluble compositions. (Column 1, paragraph 008, lines 1 - 3). As also noted by Lopez-Berestein, Gibbs, et al, (U.S. 4,665,098) described an oral composition of fenretinide that is **not** suitable for parenteral delivery. Thus, there continues to be a need for improved fenretinide compositions for parenteral delivery.

Lopez-Berestein et al, only describe and teach liposomal compositions of fenretinide for parenteral administration. However, **liposomal compositions are distinct from emulsion compositions**. Liposomes are complex lipid shells that encapsulate drugs for delivery. While they can be effective in solubilizing compounds with poor aqueous solubilities, liposomes suffer from difficulty of uniform manufacture and stability, as is well documented in the general literature, and evidenced by their relatively low incidence of FDA approval. Thus, the recourse of Lopez-Berestein, et al, to liposomal formulations of fenretinide to achieve a parenteral formulation is an implicit recognition of their failure to formulate fenretinide in a more easily manufactured, and quality-controllable, composition, as provided by the distinctive emulsion formulation now claimed.


Nothing in **Chen et al.** or **Shudo et al.** teaches or provides the missing elements of **Lopez-Berestein et al.** in the context of the combination of features of the invention as claimed.

In view of the foregoing, it is respectfully submitted that claims 11-28 are nonobvious, and respectfully submitted that this rejection should now be withdrawn.

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It is respectfully submitted that this application is in condition for allowance,
which action is respectfully requested.

Respectfully submitted,


Kenneth D. Sibley
Registration No. 31,665



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Vickie Diane Prior